

REMARKS

The application has been amended and is believed to be in condition for allowance.

Amendments to the Disclosure

Claims 1-4 are canceled, without prejudice.

Claim 5 is amended to clarify the recitation of the recited feature "running OPC (Optimum Power Calibration)". In particular, claim 5 is amended to recite this feature as correcting a laser power according to a power of a reflected laser light on a recording surface of an information recording medium while irradiating laser light for recording of record information.

The amendment finds support at least at page 46, lines 7-22 of the specification originally filed and does not introduce new matter.

Claim 5 is also amended to address antecedent basis issues and formal issues in consideration of U.S. practice and preferences. No new matter is introduced by way of these amendments.

Claims 7 and 14-23 are amended in a manner consistent with the amendments to claim 5, described above; none of the foregoing amendments to claims 5, 7 and 14-23 introduce new matter.

Additionally, claim 5 is amended to delete the recitation of an optimization on the basis of at least one of the control information recorded in said recording control area of said information recording medium. Claim 5 is further amended to recite the "recording control area" as being where control information for correction-controlling a laser power in accordance with a recording position in said recording area is recorded.

Claims 14, 16, 18, 20 and 22 are also amended consistent with the foregoing amendment to claim 5. The foregoing amendment to claims 5, 14, 16, 18, 20 and 22 does not introduce new matter.

Based on the foregoing, it is therefore respectfully submitted that that all the amendments to claims 5, 7 and 14-23 are proper.

Formal Matters - Section 112, first paragraph

The Official Action rejected claims 5-13, 16, 17 and 20-23 under 35 USC 112, first paragraph, stating that the aforementioned claims fail to comply with the written description requirement.

In particular, the Official Action objected to the term "correcting device" recited in claims 5, 7, 16, 17, and 20-23 as not being defined or taught in the specification.

In response, it is respectfully submitted that the specification as originally filed describes a calibration curve

being corrected on the basis of a result of the calibration performed by a running Optimum Power Calibration ("OPC").

The calibration curve is an embodiment of the control information because the calibration curve is specifically a relational expression between the ratio of the optimum recording laser power and the recording position, as described in the specification at page 48, lines 9-17 (see also page 49, lines 3-19).

Thus, it is respectfully submitted that a "correcting device" which corrects the control information on the basis of the result of the running OPC is defined and explained in the specification.

It is therefore respectfully submitted that the claimed feature of a "correcting device" is adequately described in the specification so to reasonably convey to one of skill that the inventors, at the time the application was filed, had possession of the claimed invention. Accordingly, it is respectfully submitted that claims 5, 7, 16, 17, and 20-23 are proper in view of the written requirement of 35 USC 112, first paragraph.

Withdrawal of the rejection in view 35 USC 112, first paragraph is thereby respectfully requested.

Formal Matters - Section 112, second paragraph

The Official Action rejected claims 1-4 under 35 USC 112, second paragraph as being indefinite.

In response, claims 1-4 are canceled, without prejudice. It is therefore respectfully submitted that the rejection for indefiniteness has been rendered moot. Withdrawal of the rejection under 35 USC 112, second paragraph is thereby respectfully requested.

Substantive Issues - Sections 102 and 103

The Official Action rejected claims 1-11 and 14-23 under 35 USC 102(b) as being anticipated by Miyata (US 6,052,347; "MIYATA").

The Official Action rejected claims 12 and 13 under 35 USC 103(a) as being unpatentable over MIYATA in view of Ito et al. (U.S. Publication US2003/0137909; "ITO").

The rejections are respectfully traversed for at least the reasons that follow.

It is firstly noted that claims 1-4 are canceled, as indicated above. It is therefore respectfully submitted that the rejections under 35 USC 102(b) are rendered moot.

As to claim 5, it is respectfully submitted that MIRATA fails to teach correcting a control information on the basis of a result of a "running OPC".

On the contrary, MIYATA merely teaches writing two OPC areas with varying recording powers in a constant angular velocity zone of the disk, determining an optimum recording power for each of the two OPC areas, and determining a recording power distribution proportional to both linear velocity and a ratio of

the radii of said two optimum power control areas for the constant angular velocity zone of the disk by analyzing the optimum recording power which was determined for the two OPC areas.

MIYATA makes no teaching or suggestion of the novel feature claimed by the present invention of correcting a control information for controlling the laser power on the basis of a running OPC. As described at page 31, lines 3-15 of the specification, one non-exclusive example of the control information is recording-sensitivity information including a calibration curve (specifically, a relational expression between the ratio of the optimum recording laser power and the recording position).

Because the control information contains such information, the information recording apparatus can control the laser power in accordance with a recording position in the recording area of the information recording medium according to the control information.

Furthermore, the information recording apparatus also comprises the correcting device for correcting the control information which is recorded on an information recording medium, on the basis of a result of the running OPC.

As described at page 46, lines 12-19 of the specification, the running OPC is calibration of the recording laser power, performed in parallel with the recording operation

of the data. More specifically, it compares the intensity of the reflected light of the light beam upon the data recording operation, with the intensity of the reflected light of the light beam at the time of the OPC operation performed in the OPC area on the lead-in area. Then, the recording laser power of the optical pickup is adjusted to eliminate a difference in the intensity of the reflected light (i.e. such that the intensities of the reflected light have the same value).

Because of the feature of the correcting device, the recording information can be corrected to indicate more accurate value of the laser power than before the correction is done. Then, the optimizing device of the information recording apparatus can optimize the laser power on the basis of the corrected control information.

Moreover the information recording apparatus as recited in claim 7 of the present application can generate the control information and can correct the control information in the same manner of the information recording device on claim 5. As a result of this feature as claimed, the information recording apparatus of claim 7 can provide benefit which can be provided by the information recording apparatus of claim 5, even if the control information is not recorded on the information recording medium. Furthermore, the information recording apparatus of claim 7 can record at least one of the generated control information and the corrected control information.

MIYATA fails to anticipate these features as recited in the amended claims 5 and 7.

It is therefore respectfully submitted that the claims 5 and 7 are patentable.

It is also respectfully submitted that independent claims 14-23 are patentable for the same reasons set forth above as to claims 5 and 7, and further respectfully submitted that dependent claims 8-13 are patentable at least for dependent from a patentable parent claim.

Reconsideration and allowance of the claims are respectfully requested.

From the foregoing, it will be apparent that Applicants have fully responded to the October 16, 2009 Official Action and that the claims as presented are patentable. In view of this, Applicants respectfully request reconsideration of the claims, as presented, and their early passage to issue.

In order to expedite the prosecution of this case, the Examiner is invited to telephone the attorney for Applicants at the number provided below if the Examiner is of the opinion that further discussion of this case would be helpful in advancing prosecution.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Jeremy G. Mereness/

Jeremy G. Mereness, Reg. No. 63,422
209 Madison Street
Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

JGM/dp